

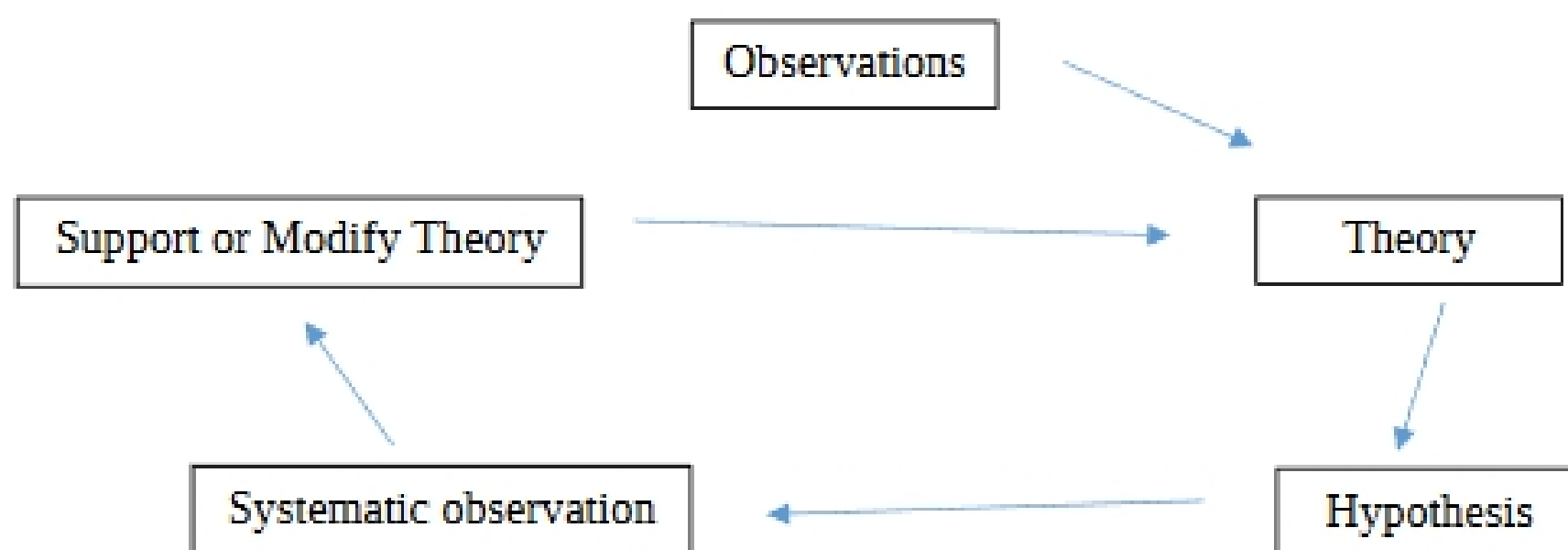
EXAM #1 NOTES

Professor: Sherry Corneal

- The “Jim” Twins: MAJOR study that tells us a lot about nature vs. nurture, biological and environmental factors
 - o Research at University of Minnesota study twins who are separated at birth and then reunited at adulthood
 - o Majority of the twins score very similarly on all tests of these studies
 - o The Jim twins went for their test and both of them...
 - Were part-time sheriffs, drove Chevrolets, vacationed at the same beach in Florida, had dogs named Toy, both married a women named Betty, both were married twice and their first wife’s name was Linda, chewed fingernails to the nub, had identical drinking and smoking habits, both were named Jim by adopted parents, had sons named James Allen, both had hemorrhoids, had headaches that began at age 18 and used the same words to describe them, had some differences but the similarities are overwhelming
- **Lifespan Perspective**
 - o Traditionally, we thought that what we were searching for was *one path of development*
 - Because we were following the footsteps of the hard sciences and their laws
 - What are the “laws” that govern development
 - We ignored any outlier (something that didn’t follow this path)
 - o But the lifespan perspective tells us that we are not to look for this one specific path
 - o **THE SEVEN ASSUMPTIONS OF THE LIFESPAN PERSPECTIVE**
 1. **Development is a lifelong process**
 - a. Every stage of development involves particular tasks (from cradle to grave)
 - b. How does development at one stage of life affect development at another stage of life?
 2. **Multi-directionality**
 - a. Development can take many directions (contrary to the *one path* belief)
 3. **Plasticity**
 - a. The degree to which characteristics can or cannot change throughout the lifespan
 - b. There are 5 personality traits that seem to be stable across lifetime (OCEAN)
 - i. Openness
 - ii. Conscientiousness
 - iii. Extroversion
 - iv. Agreeableness
 - v. Neuroticism
 - c. Experience can change the brain at any stage
 - d. Plasticity varies greatly between individuals
 - i. Personality affects how plastic (willing/susceptible) we are to change
 4. **Development must be viewed in historical context**
 - a. Social movements
 - b. Technology
 - c. War
 5. **Contextualism**
 - a. Development must be studies in various contexts
 - b. “development is an ongoing interaction between a changing individual in a changing environment”

- c. Reciprocal influence: the developing individual influences and is influenced by his/her environment
 - 6. **Multidimensionality**
 - a. Biological, cognitive, social, and emotional factors interact to affect development
 - b. Don't confine yourself to just one area because there are many that interplay
 - 7. **Multidisciplinary**
 - a. The study of human development should involve collaboration across various fields of study
- **Nature vs. Nurture Concept**
 - o Nature: influence of heredity on development, biologically based predisposition
 - Whether a child is inhibited (shy) or uninhibited (outgoing) is genetically predisposed
 - Some children are born with excitable amygdala's (easily excitable, emotional) and others are born with one that remains calmer (more relaxed)
 - An inhibited kid will almost never become an outgoing kid
 - Characteristics of inhibited children:
 - o Reluctance to initiate conversation (or smile) with strangers
 - o Reluctant to take risks
 - o Reluctant to make firm decisions
 - o High muscle tension
 - o Prone to allergies
 - o Light blue eyes (not always but usually)
 - o Ectomorphic body build (skinny)
 - o Nurture: forces in the environment—outside the individual—that influence development
 - o How much can we change? What stays the same from birth (nature)?
 - How do nature and nurture interact to effect development?
 - o Non-shared environment: kids grow up in the same family but do not grow up with the same experience because their parents may react/treat them differently from their sibling(s)
 - o Traits that have a genetic predisposition:
 - Intelligence- there is a cap/limit on how intelligent we can be, i.e. if you are deprived in the womb for whatever reason of your full IQ, tests can improve it but only to whatever number that limit was
 - Verbal ability
 - Vocational interest
 - Scholastic achievement
 - Memory
 - o OCEAN: Not very susceptible to change over time (stable traits)
 - Openness: independent and imaginative or conforming and practical
 - Conscientiousness: organized, conscious or impulsive, disorganized
 - Extroversion: sociable, outgoing vs. Introversion: reserved
 - Agreeableness: cooperative or uncooperative
 - Neuroticism: whether you get overly anxious or calm, secure or insecure
- *2007 Study of Baby Einstein Videos*: Christakis and Zimmerman, evidence suggested that videos may hurt language development for infants ages 8-16 months, 17% drop in vocab for babies who watched the videos vs. babies who engaged in face-to-face interaction with adults
 - o Something about face-to-face interaction (tone of voice, facial expression) that has a profound effect on how your brain is wired, better than watching videos that are 'supposed' to help infants learn—don't replace face-to-face interaction with technology (negative impact)
 - o Experience wires the brain, but it is not permanent, can be rewired at any stage of development
- The *environment* modifies/enhances the traits that are predisposed
 - o Our environment can either bring out/enhance these traits or repress/hide these traits that we are born with (they are always there, but the environment can change how extreme they are)

- **Stability vs. Change**
 - o Is personality stable over time?
 - o To what extent do early experience set the life path of individuals?
 - o How well can we predict later development from early development?
- Research = empirical inquiry
 - o Evidence based on observation
 - o We can only trust that which we can see
 - o Scientific investigation: GOALS (3)
 - Description: describe average trends
 - i.e. the average newborn is around 8 lbs., children of divorce have more behavioral problems
 - Explanation: why do we develop as we do? Explain the description
 - i.e. newborns are born 8 lbs. because of the foods their mother eats while pregnant, children of divorce have more behavioral problems because they didn't grow up in a stable home
 - Optimization: how can we help people develop in a positive direction?
 - Reach fullest potential
- Science is not defined by *what* it studies, but *how* it conducts investigations
- Theory: a set of assumptions that attempt to describe, predict, or explain a phenomenon
- Cycle of science



- **Correlation research**: the goal is to describe the *strength* and *direction* of the relationship between two variables
 - o A correlation coefficient ranges in value from -1.0 → +1.0
 - The closer to -1.0 or +1.0, the stronger the relationship
 - Positive means the variables move in the same direction, Negative means the variables move in opposite directions
 - i.e. relationship between kids who attend class and grades on exams has a correlation coefficient of +.90
 - this tells us that the more that kids attend class, the better they do on exams
 - i.e. relationship between parents who constantly argue and child's performance in school has a correlation coefficient of -.70
 - this tells us that the more the parents argue, the more poorly the child performs in school
 - o as fighting increases, performance decreases (one goes up, one goes down)
 - o In correlation research, we can predict one variable from the other but cannot predict which causes which
 - Correlation does NOT equal causation
 - There may be a third variable that can cause the correlation between the two variables